

Statement of Considerations

REQUEST BY SIEMENS WESTINGHOUSE POWER CORPORATION FOR
AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN
SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER
DEPARTMENT OF ENERGY CONTRACT NO. DE-AC05-95OR22242; DOE
WAIVER DOCKET W(A)-95-043 [ORO-616]

Siemens Westinghouse Power Corporation (hereinafter referred to as "SWPC"), has made a timely request for an advance waiver of worldwide rights in Subject Inventions made in the course of or under Department of Energy (DOE) Contract No. DE-AC05-95OR22242. The contract was originally awarded to the Westinghouse Electric Corporation, which later changed its name to CBS Corporation. On August 20, 1998, CBS Corporation sold its Westinghouse Power Generation Business Unit to Siemens Power Generation Corporation, and a new entity, Siemens Westinghouse Power Corporation, was formed. DOE subsequently entered into a novation agreement with CBS and SWPC to transfer responsibility for the performance of the subject contract to SWPC. An updated waiver petition dated April 19, 1999, requested that the waiver be granted to SWPC. Although SWPC originally requested that it be granted title to inventions made by its subcontractors, it subsequently withdrew that request in an e-mail message dated May 4, 2001. The goal of this project is to develop and demonstrate an improved thermal barrier coating (TBC) system to meet the needs of the advance turbine system (ATS) engine. The work was sponsored by the Office of Fossil Energy.

The total value of the contract is \$6,238,528, with DOE's cost share being \$4,991,622 or 80%, and the Contractor's cost share being \$1,246,906 or 20%. The performance period was November 16, 1995 through May 1, 2001. At least nine inventions have been reported to DOE patent counsel under this contract.

SWPC is technically competent in the field of technology of the subject contract. As mentioned in its response to question 4 of the updated waiver petition, SWPC is a long-standing global leader in the design and manufacture of high performance combustion turbine generators. SWPC has over 20 years experience in developing coatings internally and in collaboration with vendors. SWPC also has considerable expertise in the life prediction modeling of blade and vane materials, coating systems, and nondestructive diagnostic technologies. SWPC has been actively advancing blade development for 30 years and continues to be committed to bringing advanced power concepts to the turbine market. SWPC's research in the life prediction and modeling field, along with its development of advanced TBC and other coatings, provides strong relevant experience for the design and modeling of TBC systems and processes. Also indicative of the its continual advancement of combustion turbine technology in general and TBC technology in particular, SWPC has an extensive patent portfolio (see the list of Contractor-owned patents in Attachments 1 and 2 to the updated waiver petition). Therefore, SWPC's experience, expertise

and commitment will contribute substantially to commercialization of the inventions made under the contract.

The response to question 5 in the updated waiver petition indicates that, as a major national and international supplier of power generation equipment, SWPC has an established commercial position in the power generation field. Its turbine-generator equipment is available in a variety of sizes to meet different applications. SWPC has commercialized innovative technology that has allowed the utility industry to continually improve economics, while generating environmentally safe and reliable electric power. Its utility turbines are sold as commercial items to electric utilities, independent power producers and industrial entities that generate their own power and heat source. SWPC's program to advance the development of thermal barrier coatings for gas turbine components is vital to the continued development of efficient power systems.

In response to question 6, SWPC states that it has made considerable prior investment in technology to develop overlay coatings and thermal barrier coatings. Work on overlay coating development began in the 1960s and SWPC has invested several million dollars in this effort. In 1994, SWPC began a program to develop new TBC systems. The technology that was developed under this program forms the basis for the work performed under the subject contract. In addition to privately funded programs, SWPC has another thermal barrier coating effort under the ATS program that is valued at over \$1 million and is cost shared by SWPC. These projects constitute a previous financial investment that was made by SWPC and that is directly related to the work performed under the subject contract.

The contract was performed with the standard DOE "Patent rights-acquisition by the Government" clause. SWPC has approved the Patent Rights - Waiver terms and conditions (see Attachment A), and upon approval of this waiver request, that waiver clause will be incorporated into the contract as a no-cost modification.

The Patent Rights - Waiver clause accepted by SWPC includes march-in rights (35 U.S.C. § 203), the granting of licenses to background patents necessary for practicing subject inventions, retention by the Government of a license (35 U.S.C. § 202(c)(4)), preference for U.S. industry (35 U.S.C. § 204), and U.S. Competitiveness provisions. The clause also contains a provision requiring SWPC to obtain DOE approval of any transfer or other alienation of any intellectual property first specifically developed in the performance of the work funded under the DOE ATS Program -- including technical data and subject inventions -- (hereafter termed "Intellectual Property") to any foreign company or American subsidiary of a foreign company. Such approval is contingent on agreement by the company to whom such rights are transferred or otherwise alienated to substantially manufacture any specifically developed ATS products embodying any such Intellectual Property or produced through the use of any such Intellectual Property in the United States. In the event the company acquiring such rights does not meet the substantial United States manufacture requirement, the clause provides for repayment of the funds contributed by DOE to all phases of SWPC's ATS program, licensing or return to DOE of foreground Intellectual Property and licensing of background Intellectual Property.


In addition, SWPC has agreed to modification of the data clause of the subject contract (48 C.F.R. 52.227-14) by adding paragraph (k), Alternative VI (48 C.F.R. 952.227-14), concerning contractor licensing of data.

In its response to question 8 of the updated petition, SWPC states that granting the waiver will enhance markets by providing an incentive for it to both vigorously develop the technology and pursue identifiable markets. SWPC requires exclusivity in subject inventions as an incentive to further invest, develop and market the TBC technology and also for the purpose of commercializing advance turbine systems.

According to its response to question 9 of the updated waiver petition, granting of the waiver should have little effect on competition and market concentration since this is one of several previously or yet-to-be developed similar technologies in the marketplace. Other companies produce combustion turbines with thermal barrier coated hot section components, therefore there should not be undue market concentration of SWPC's products. Further, grant of the waiver will increase the Contractor's incentive to develop advanced TBC systems for hot section components and thus improve the lifetimes and efficiencies of combustion turbine engines. SWPC requires a substantial degree of exclusivity to protect the initial commitment of resources necessary to bring subject inventions to commercialization. However, it also has a generally accepted and long standing corporate policy to license its technology on fair and reasonable terms to responsible parties. Thus, SWPC does not intend to exclude others from the field, but the degree of exclusivity requested will protect the risk capital needed to bring the technology represented by the subject inventions to the public.

Grant of the requested waiver should serve as encouragement to other DOE contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the acceptable level of cost sharing by Siemens Westinghouse Power Corporation and the objectives and considerations set forth in 10 C.F.R. 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.


Lisa A. Jarr
Patent Counsel

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted to the Siemens Westinghouse Power Corporation. This waiver shall not apply to a modification or extension of the cost-shared contract where, through such a modification or extension, the purpose, scope or cost of the contract has been substantially altered.

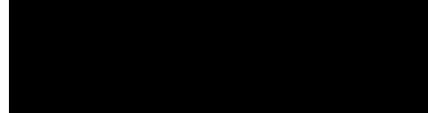
CONCURRENCE:



George Rudins
Deputy Assistant Secretary
Office of Coal and Power Systems

Date: April 29, 2002

APPROVAL:



Paul A. Gottlieb
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 5-2-02

(r) *Publication.*

It is recognized that during the course of work under this contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Contractor, approval for release of publication shall be secured from Patent Counsel prior to any such release or publication. In appropriate circumstances, and after consultation with the Contractor, Patent Counsel may waive the right of prepublication review.

(s) *Forfeiture of rights in unreported subject inventions.*

(1) The Contractor shall forfeit and assign to the Government, at the request of the Secretary of Energy or designee, all rights in any subject invention which the Contractor fails to report to Patent Counsel within 6 months after the time the Contractor:

- (i) Files or causes to be filed a United States or foreign patent application thereon;
- or
- (ii) Submits the final report required by paragraph (e)(2)(ii) of this clause, whichever is later.

(2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in paragraph (m)(1) of this clause, the Contractor:

- (i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer;
- or
- (ii) Contending that the subject invention is not a subject invention, the Contractor nevertheless discloses the subject invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer, or
- (iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

(3) Pending written assignment of the patent application and patents on a subject invention determined by the Contracting Officer to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph shall be in addition to and shall not supersede any other rights and remedies which the Government may have with respect to subject inventions.

(t) *U.S. Competitiveness.*

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived